REMARKS

Applicants amend independent claims 1 and 9, and claims 1-15 are pending in this application. Applicants respectfully request allowance of all the pending claims.

The Examiner rejects claims 1-4, 6, and 8-10, 12, 14, and 15 under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 5,857,538 ("Chambers") in view of Soviet Patent No. 811015 ("Panov"). The Examiner rejects claims 5 and 11 under 35 U.S.C. §103(a) as being unpatentable over Chambers as modified by Panov and in further view of United States Patent No. 4,828,069 ("Hatsuyama"), and the Examiner rejects claims 7 and 13 under 35 U.S.C. §103(a) as being unpatentable over Chambers as modified by Panov and in further view of French Patent No. 1020216 ("Bernard").

Claim 1 recites a motorcycle including a frame and an engine/transmission assembly mounted to said frame and having an output shaft rotating in response to the operation of the engine/transmission assembly. A drive sprocket is mounted to the output shaft for rotation with the output shaft. A swingarm is pivotably mounted to the frame or the engine/transmission assembly for pivotal movement within a range of motion. A rear wheel is mounted to the swingarm for rotation, and a wheel sprocket is mounted to the rear wheel for rotation with the rear wheel. A flexible drive member couples the drive sprocket and the wheel sprocket such that the rear wheel is caused to rotate in response to the operation of the engine/transmission assembly. The flexible drive member includes an upper extent extending between the upper portions of the drive sprocket and the wheel sprocket, and a lower extent extending between the lower portions of the drive sprocket and the wheel sprocket. A tensioner is fixed to the frame or the engine/transmission assembly against both pivotal and translational movement with respect to the output shaft. The tensioner maintains contact with a side of the lower extent and applies a force to the side of the lower extent as the swingarm pivots through the range of motion. The drive sprocket, the wheel sprocket, and the tensioner are sized and positioned such that a belt path length defined by the drive sprocket, the rear sprocket, and the tensioner remains substantially constant as the swingarm pivots through the range of motion.

Claim 9 recites a method for tensioning a motorcycle flexible drive member. The method includes providing a motorcycle frame and a swingarm, mounting an engine/transmission assembly to the motorcycle frame, the engine/transmission assembly having an output shaft rotating about an axis of rotation in response to operation of the engine/transmission assembly,

mounting a drive sprocket to the output shaft for rotation therewith, mounting a rear wheel to the swingarm for rotation with respect to the swingarm, mounting a wheel sprocket to the rear wheel for rotation therewith, pivotably interconnecting the swingarm with at least one of the frame and engine/transmission assembly to permit pivotable movement of the swingarm in a range of motion about a pivot axis that is non-collinear with the axis of rotation of the output shaft, coupling the drive sprocket and the wheel sprocket with a flexible drive member such that the rear wheel rotates in response to rotation of the output shaft mounting a tensioner to at least one of the engine/transmission assembly and frame such that the tensioner contacts a side of a lower extent and applies a force to the side of the lower extent, fixing the tensioner against translational and pivotable movement with respect to the engine/transmission assembly and frame, pivoting the swingarm through the range of motion while maintaining a substantially constant belt path length defined by the drive sprocket, the wheel sprocket, and the tensioner, and maintaining contact between the side of the lower extent and the tensioner such that the tensioner applies a force to the side of the lower extent as the swingarm pivots through the range of motion.

Claim 1 recites, among other things, a tensioner that maintains contact with a side of a lower extent of a flexible member and applies a force to the side of the lower extent as a swingarm pivots through its range of motion. Claim 9 recites, among other things, maintaining contact between a side of a lower extent of a drive member and a tensioner such that the tensioner applies a force to the side of the lower extent as a swingarm pivots through its range of motion. Claims 1 and 9 each recite maintaining contact between the tensioner and a side of the lower extent such that the tensioner applies a force to the side of the lower extent as the swingarm pivots through its range of motion. Because claims 1 and 9 recite this similar limitation, independent claims 1 and 9 will be discussed together with respect to the rejections.

Chambers discloses a motorcycle (10) having an engine operably coupled to the rear wheel (58) by a chain (11). In Figs. 9 and 10, the motorcycle includes a biased tensioner (not identified) that contacts the lower extent of the chain (11).

Panov discloses a chain drive for a motorcycle. The chain drive includes a chain tensioner (8) that interacts with a lower extent of the chain (11) to compensate for the play in the lower extent of the chain (11) and maintain a constant chain tension as a swingarm (4) moves upward and downward through its range of motion. The tensioner (8) includes a bottom roller (9) in contact with the bottom side of the lower extent of the chain (11) and a top roller (10) in

contact with the top side of the lower extent of the chain (11). The top roller (10) applies a force to the top side of the chain (11) when the swingarm (4) swings upward and the bottom roller (9) applies a force to the bottom side of the chain (11) when the swingarm (4) moves downward. In contrast, the top roller (10) does not apply a force to the top side of the chain (11) when the swingarm (4) swings downward and the bottom roller (9) does not apply a force to the bottom side of the chain (11) when the swingarm (4) swings upward.

The Examiner concedes that Chambers does not teach or suggest a tensioner that is fixed to the frame or the engine/transmission assembly against both pivotal and translational movement with respect to the output shaft. However, the Examiner argues that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the tensioner of Chambers with a fixed tensioner such as the one disclosed in Panov.

Panov does not teach or suggest maintaining contact between a tensioner and a side of a lower extent such that the tensioner applies a force to the side of the lower extent as the swingarm pivots through its range of motion. More specifically, neither the top nor the bottom roller (9, 10) disclosed in Panov maintains contact with and applies a force to a side of the lower extent as the swingarm pivots through its range of motion. The top roller (10) of Panov applies a force to the top side of the chain (11) when the swingarm (4) swings upward, but does not apply a force to the top side of the chain (11) when the swingarm (4) swings downward. Likewise, the bottom roller (9) of Panov applies a force to the bottom side of the chain (11) when the swingarm (4) moves downward, but does not apply a force to the bottom side of the chain (11) when the swingarm (4) swings upward.

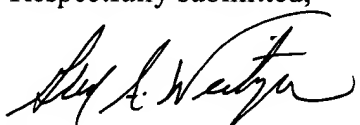
Even if both rollers (9, 10) in combination are considered by the Examiner to be the tensioner (8), Panov does not disclose applying a force to one side of the lower extent as the swingarm pivots through its range of motion. As the swingarm (4) pivots upwardly and downwardly, the tensioner (8) applies a force to different sides of the lower extent. Specifically, the tensioner (8) applies a force to the top side (via the top roller (10)) as the swingarm (4) pivots upwardly and the bottom side (via the bottom roller (9)) as the swingarm (4) pivots downwardly. The tensioner (8) does not consistently apply a force to the same side of the lower extent as the swingarm (4) pivots through its range of motion.

Chambers and Panov, alone or in combination, do not teach or suggest the subject matter defined by independent claims 1 and 9. Accordingly, independent claims 1 and 9 are allowable.

Claims 2-8 depend from allowable independent claim 1 and claims 10-15 depend from allowable independent claim 9. The dependent claims are allowable for the same reasons as the independent claims and for other reasons.

The Examiner is invited to contact the undersigned attorney should the Examiner determine that such action would facilitate the prosecution and allowance of the present application.

Respectfully submitted,



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